

Amendments to the Specification:

Please add the following material to the specification on page 13, first line.

The compounds of formula I can be prepared by a process characterized in that a 17-chloro-1,3,5(10),16-tetraene-17-one of general formula II

[paste structure]

(II)

in which

R₁ means a hydrogen atom, a C₁₋₅ alkyl radical, a C₁₋₆ alkanoyl radical or benzoyl radical,

R₂ means C₁₋₆ alkyl group,

is converted with a magnesium-organic reagent of general formula BrMg alkyl, BrMg alkenyl or BrMg alkynyl or with acetylene or an alkyl- or aryl-substituted acetylene in the presence of bases such as tert-BuOK or with a lithium-organic compound such as LiC₂F₅, or with a silicon-organic compound such as trifluoromethyl trimethylsilane into a 17α-substituted compound of general formula III,

[paste structure]

(III)

in which

R₁ is a hydrogen atom, a C₁₋₆ alkyl radical, a C₁₋₆ alkanoyl radical or a benzoyl radical,

R₂ is a C₁₋₆ alkyl group,

R₃ is a hydrogen atom, a metal atom or a silyl group, and

R₄ is a hydrogen atom, a C₁₋₆ alkyl group, a C_nF_{2n+1} group, in which n=1, 2 or

3, or a C≡CR₅ group, in which R₅ is a hydrogen atom, a C₁₋₆ alkyl radical or an unsubstituted or substituted phenyl radical,

whereby in the case of R₅ = hydrogen, the free 17αα-ethinyl compound of general formula III is further modified by a SONAGASHIRA reaction to form compounds with R₅ = C₆H₄R₆, in which R₆ stands for a free or substituted hydroxyl group, amino group, thiol group, sulfamate group, sulfonyl group or a C₁₋₆ alkyl group or C₆₋₁₂ aryl group.

In another aspect, the compounds of formula III in which R₁ is a C₁₋₆ alkyl radical, are converted by ether cleavage into the free hydroxyl group.

In another aspect, the compounds of formula III, in which R₁ is an acyl radical, are converted by ether cleavage into the free hydroxyl groups.

In another aspect, the compounds of formula III, in which R₃ is a hydrogen atom, are converted into ethers or esters.